	UTAH OIL AND GAS CONSERVATION COMMISSION									
REMARKS:	WELL LOG	ELE!	CTRIC LOGSFILEX	WATER SANDS	LOCATI	ON INSPEC		SUB. REPORT/abd.		
98081	27 A	'D ex								
		0	<i>U</i> ` • • • • • • • • • • • • • • • • • •							
										,
DATE FILED	Д	UGUST	25. 1995							
LAND: FEE & P			EASE NO.	PUBLIC	LEASE NO.	U-181	34	INDIAN	AT 100	
DRILLING APPR	ROVED: F	EBRUA	RY 6, 1996							
SPUDDED IN:								`		
COMPLETED:	8.17.0	18 LA	PUT TO PRODUCING:							
INITIAL PRODU	JCTION:									
GRAVITY A.P.I.										
GOR:										
PRODUCING ZO	ONES:									
TOTAL DEPTH	:									
WELL ELEVATION	ON:									
DATE ABANDO	NED: HU	gust	17-1998 LA'D							
FIELD:	Ú	MDESIG	NATED						<u></u>	
UNIT:										
COUNTY:	Е	MERY								
WELL NO.	F	ERRON	FEDERAL 5-12-19	- 7	'WF 1	API N	0. 43.	-015-30265		•
LOCATION	1919	FNL F	T. FROM (N) (S) LINE, 1867 FE	L FT. F	ROM (E) (W)	LINE. S	WNW	1/4 — 1/4 SE	c. 12	
TWP.	RGE.	SEC.	OPERATOR		TWP.	RGE.	SEC.	OPERATOR		
198	7E	12	CHANDLER & ASSO	CIATES						

Form 3160-3 (December 1990)

SUBMIT IN TRIPLICATE.

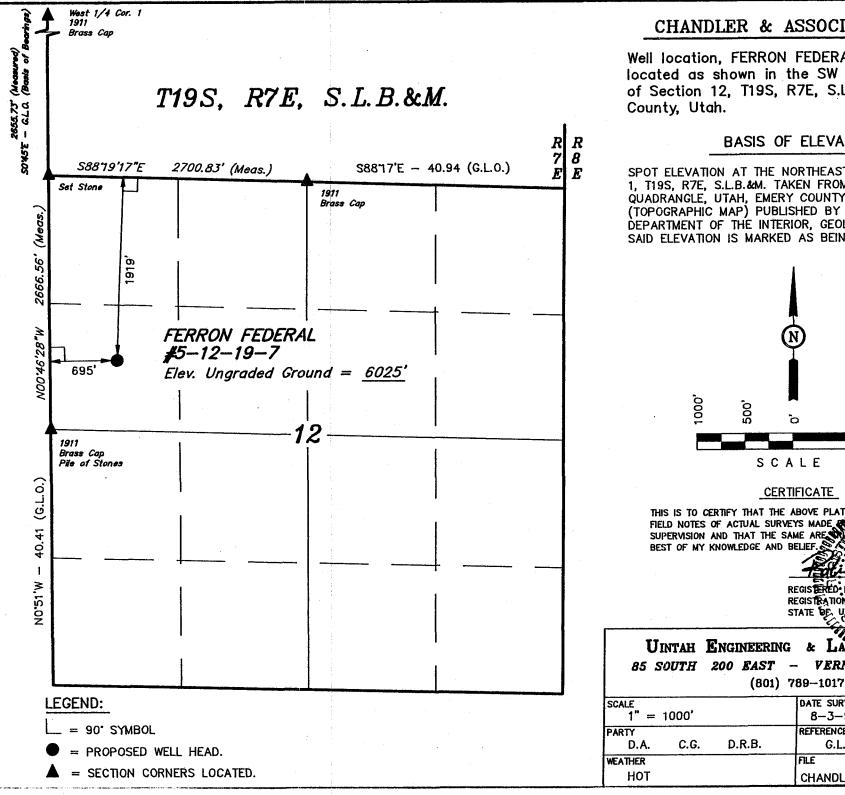
Cother instructions on reverse(3036)

Form approved.
Budget Bureau No. 1004-0136
Expires: December 31, 1991

UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGE	GEMENT	see to	U-18134	THE BELLET NO.
APPLICATION FOR PERMIT TO	DRILL OR DEEPEN:	28 PM	16. WINDIAN, ALLOTTER	OR TRIBE NAME
1a. TYPE OF WORK DRILL X DEEPEN b. TYPE OF WELL		5 N 1	N/A 7. UNIT AGREEMENT NA	
OIL GAS WELL X OTHER	SINGLE MULTIP	LE	8. FARM OR LEASE NAME, WELL	L NO.
2. NAME OF OPERATOR Chandler & Associates, Inc.			Ferron Feder 9. AM WELLNO.	a <u>l</u>
3. ADDRESS AND TELEPHONE NO. 475 Seventeenth St., Suite 1000 Deny	(303) 295 ver. CO 80202	-0400	#5-12-19-7	R WILDCAT
4. LOCATION OF WELL (Report location clearly and in accordance wind surface 1919' FNL 1867'FEL Sec. 12, 7 At proposed prod. zone	th any State requirements.*)	м.	Ferron 11. SBC, T, E, M, OR B AND SUEVEY OR AR Sec. 12, T19S, R7	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POS See Topo Map "A" (attached)	ST OFFICE*		12. COUNTY OR PARISH Emery	13. STATE UT
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any) 2100'	16. NO. OF ACRES IN LEASE 1480.44		OF ACRES ASSIGNED HIS WELL 160	

FLARING OR VENTING OF GAS IS SUBJECT TO NTL 4-A	CONDITIONS OF APPROVA	L ATTACHED
Bluf L. Kay	TITLE Agent for Chandler	DATE 8-23-95
(This space for Federal or State office (4se) PERMIT NO. 43-0/5-30265	APPROVAL DATE	
Application approval does not warrant or certify that the applicant holds is CONDITIONS OF APPROVAL IF ANY: /S/ WILLIAM C. STRINGER	egal or equitable title to those rights in the subject lease which would en	representation of the properties of the second of the seco
APPROVED BY *See	Instructions On Reverse Side	ATE

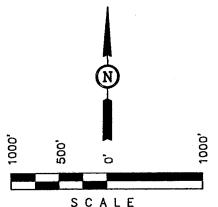


CHANDLER & ASSOCIATES, INC.

Well location, FERRON FEDERAL #5-12-19-7, located as shown in the SW 1/4 NW 1/4 of Section 12, T19S, R7E, S.L.B.&M. Emery

BASIS OF ELEVATION

SPOT ELEVATION AT THE NORTHEAST CORNER OF SECTION 1, T19S, R7E, S.L.B.&M. TAKEN FROM THE CASTLE DALE QUADRANGLE, UTAH, EMERY COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5941 FEET.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS WHERE FROM FIELD NOTES OF ACTUAL SURVEYS MADE TO CAMBER WAY SUPERVISION AND THAT THE SAME ARE THE CORRE

REGISTRATION NO. 161319

UINTAH ENGINEERING & LANGUERING

85 SOUTH 200 EAST - VERNAL, UTAH 84078

SCALE 1" =	1000'		DATE SURVEYED: 8-3-95	DATE DRAWN: 8-7-95
PARTY D.A.	C.G.	D.R.B.	REFERENCES G.L.O. PLA	AT .
WEATHER			FILE	
HOT			CHANDLER &	ASSOCIATES, INC.

Chandler & Associates, Inc. Ferron Federal 5-12-19-7 Lease U-18134 SW/NW Section 12, T195, R7E Emery County, Utah

CONDITIONS OF APPROVAL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Be advised that Chandler & Associates, Inc. is considered to be the operator of the above well and is responsible under the terms and conditions of the lease for the operations conducted on the leased lands.

Bond coverage for this well is provided by UT0969 (Principal - Chandler & Associates, Inc.) via surety consent as provided for in 43 CFR § 3104.2.

This office will hold the aforementioned operator and bond liable until the provisions of 43 CFR § 3106.7-2 continuing responsibility are met.

This permit will be valid for a period of one year from the date of approval. After permit termination, a new application must be filed for approval.

All lease operations will be conducted in full compliance with applicable regulations (43 CFR § 3100), Onshore Oil and Gas Orders, lease terms, notices to lessees, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions and the approved plan will be made available to field representatives to insure compliance.

A. <u>DRILLING PROGRAM</u>

- 1. The BOP system shall be rated to 2M as proposed. Installation, testing and operation of the system shall be in conformance with Onshore Oil and Gas Order No. 2.
- 2. The proposal indicated that a double gate or single gate BOP would be used. A double gate BOP, as depicted on your schematic, must be used. A single gate BOP does not meet the standards of Onshore Oil and Gas Order No. 2.
- 3. The application indicated that a rotating head would not be used. As with all air drilling operations, use of a rotating head is mandatory.
- 4. The application also indicated that no float would be used at the bit. During air drilling operations, a float valve must be in place above the bit.
- 5. The choke manifold diagram does not depict a pressure gauge in the system. The manifold must include a pressure gauge with a valve capable of isolating the gauge from the system.
- 6. Your application indicates that the Emery Sandstone extends down to 520 feet. Considering the potential for fresh water in the Emery Sandstone, we must assure adequate isolation. Therefore, the surface casing must be set through the Emery Sandstone, and at least 50 feet into the Bluegate Shale. The surface casing must then be cemented back to surface.
- 7. A CBL or other appropriate tool must be run to determine the top-of-cement behind the production casing.
- 8. Any fluid bearing zones or lost circulation zones encountered while drilling will be isolated behind casing and cement.
- 9. If a gas meter run is constructed, it will be located on lease within 500 feet of the wellhead. The gas flowline will be buried from the wellhead to the meter and will be buried downstream of the meter until it leaves the pad. Meter runs will be housed and/or fenced. The gas meter shall be calibrated prior to first sales and shall be calibrated quarterly thereafter. All gas production and measurement shall comply with the provisions of 43 CFR § 3162.7-3, Onshore Oil and Gas Order No. 5, and American Gas Association (AGA) Report No. 3.

CONDITIONS OF APPROVAL

Application for Permit to Drill Chandler and Associates Ferron Federal #5-12-19-7 T.19.S.,R.7.E. Sec. 12 SWNW Emery Co. Utah

- 1. No earthwork will be done when the soil is wet or frozen.
- 2. The drill pad will be designed to prevent overland flow from entering or exiting the site during rainstorms. The pad site will be sloped to drain spills and rainwater into the reserve pit.
- 3. Topsoil from the spur road will be windrowed along the uphill side of the road. When the well is plugged and the road is put to bed, this soil shall then be used as a topcoating for the seed bed.
- 4. Any paleontological resources (prehistoric object) discovered by the operator or person working on their behalf, on public or Federal land shall be immediately reported to the San Rafael Resource Area Manager. The operator shall suspend all operations in the area of such discovery until written authorization to proceed is issued by the San Rafael Resource Area Manager. An evaluation of the discovery will be made by the San Rafael Resource Area Manager to determine appropriate actions to prevent the loss of significant scientific values. Any decision as to proper mitigation measures will be made by the San Rafael Resource Area Manager after consulting with the operator.
- 5. A cattleguard will need to be installed where the road crosses the fenceline in the northwest corner of Section 12.
- 6. The seed mixture shall be made up of the following species and amounts:

Common name	<u>Latin</u>	Amount (lbs/ac)
Galleta	Hilaria jamesii	2
Indian Ricegrass	Oryzopsis hymenoides	2
Forage kochia	Kochia prostrata	2
Fourwing saltbush	Atriplex canescens	2
Shadscale	Atriplex confertifolia	2
Globemallow, scarlet	Sphaeralcea coccinea	1
Small burnet	Sanguisorba minor	1
Yellow Sweetclover	Melilotus officinalis	<u>+ 1</u>
Total:		13 lbs/ac

Substitute species may be used is prior approval is obtained from the authorized officer.

C. REQUIRED APPROVALS, REPORTS AND NOTIFICATIONS

Required verbal notifications are summarized in Table 1, attached.

<u>Building Location</u>- Contact the Resource Area, Natural Resource Protection Specialist at least 48 hours prior to commencing construction of location.

<u>Spud</u>- The spud date will be reported to the Resource Area Office 24 hours prior to spudding. Written notification in the form of a Sundry Notice (Form 3160-5) will be submitted to the District Office within 24 hours after spudding, regardless of whether spud was made with a dry hole digger or big rig.

<u>Daily Drilling Reports</u>- Daily drilling reports shall detail the progress and status of the well and shall be submitted to the District Office on a weekly basis.

Monthly Reports of Operations- In accordance with Onshore Oil and Gas Order No. 1, this well shall be reported on Minerals Management Service (MMS) Form 3160, "Monthly Report of Operations," starting the month in which operations commence and continuing each month until the well is physically plugged and abandoned. This report will be filed directly with MMS.

Sundry Notices- There will be no deviation from the proposed drilling and/or workover program without prior approval. "Sundry Notices and Reports on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR § 3162.3-2. Safe drilling and operating practices must be observed.

<u>Drilling Suspensions</u>- Operations authorized by this permit shall not be suspended for more than 30 days without prior approval of the Authorized Officer. All conditions of this approval shall be applicable during any operations conducted with a replacement rig.

<u>Undesirable Events</u>- Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be immediately reported to the Resource Area in accordance with requirements of NTL-3A.

<u>Cultural Resources</u>- If cultural resources are discovered during construction, work that might disturb the resources is to stop, and the Area Manager is to be notified.

First Production- Should the well be successfully completed for production, the District Office will be notified when the well is placed in producing status. Such notification may be made by phone, but must be followed by a sundry notice or letter not later than five (5) business days following the date on which the well is placed into production.

A first production conference will be scheduled as soon as the productivity of the well is apparent. This conference should be coordinated through the Resource Area Office. The Resource Area Office shall be notified prior to the first sale.

Well Completion Report- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted to the District Office not later than thirty (30) days after completion of the well or after completion of operations being performed, in accordance with 43 CFR § 3162.4-1. Two copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. When requested, samples (cuttings and/or samples) will be submitted to the District Office.

Venting/Flaring of Gas- Gas produced from this well may not be vented/flared beyond an initial, authorized test period of 30 days or 50 MMcf, whichever first occurs, without the prior, written approval of the authorized officer. Should gas be vented or flared without approval beyond the authorized test period, the well may be ordered shut-in until the gas can be captured or approval to continue the venting/flaring as uneconomic is granted. In such case, compensation to the lessor shall be required for that portion of the gas that is vented/flared without approval and which is determined to have been avoidably lost.

<u>Produced Water</u>- Produced waste water may be confined to an unlined pit for a period not to exceed 90 days after initial production. During the 90 day period, an application for approval of a permanent disposal method and location, along with the required water analysis, will be submitted to the District Office for approval pursuant to Onshore Oil and Gas Order No. 7.

Off-Lease Measurement, Storage, Commingling- Prior approval must be obtained from the District Office for off-lease measurement, off-lease storage and/or commingling (either down-hole or at the surface).

<u>Plugging and Abandonment</u>- If the well is completed as a dry hole, plugging instructions must be obtained from the District Office prior to initiating plugging operations.

A "Subsequent Report of Abandonment" (Form 3160-5) will be filed with the District Office within thirty (30) days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Upon completion of approved plugging, a regulation marker will be erected in accordance with 43 CFR § 3162.6. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the Area Manager or his representative, or the appropriate surface managing agency.

NOTIFICATIONS

Notify Mike Kaminski of the BLM, Price Area Office in Price, Utah, at (801) 636-3640, or at home (801) 637-2518 for the following:

- 2 days prior to commencement of dirt work, construction and reclamation;
- 1 day prior to spudding;
- 50 feet prior to the surface casing setting depth;
- 3 hours prior to testing BOPE

If the person at the above number cannot be reached, notify the Moab District Office at (801) 259-6111. If unsuccessful, contact one of the people listed below.

Well abandonment operations require 24 hour advance notice and prior approval. In the case of newly drilled dry holes, verbal approval can be obtained by calling the Moab District Office, Branch of Fluid Minerals at (801) 259-6111. If approval is needed after work hours, you may contact the following:

Eric Jones, Petroleum Engineer Office: (801) 259-6111
Home: (801) 259-2214

Gary Torres, Petroleum Engineer Office: (801) 587-2141 Home: (801) 587-2705 Form 3160-3 (December 1990)

CONDENTIAL

SUBMIT IN TRIPLICATE
(Other instructions on reverse side)

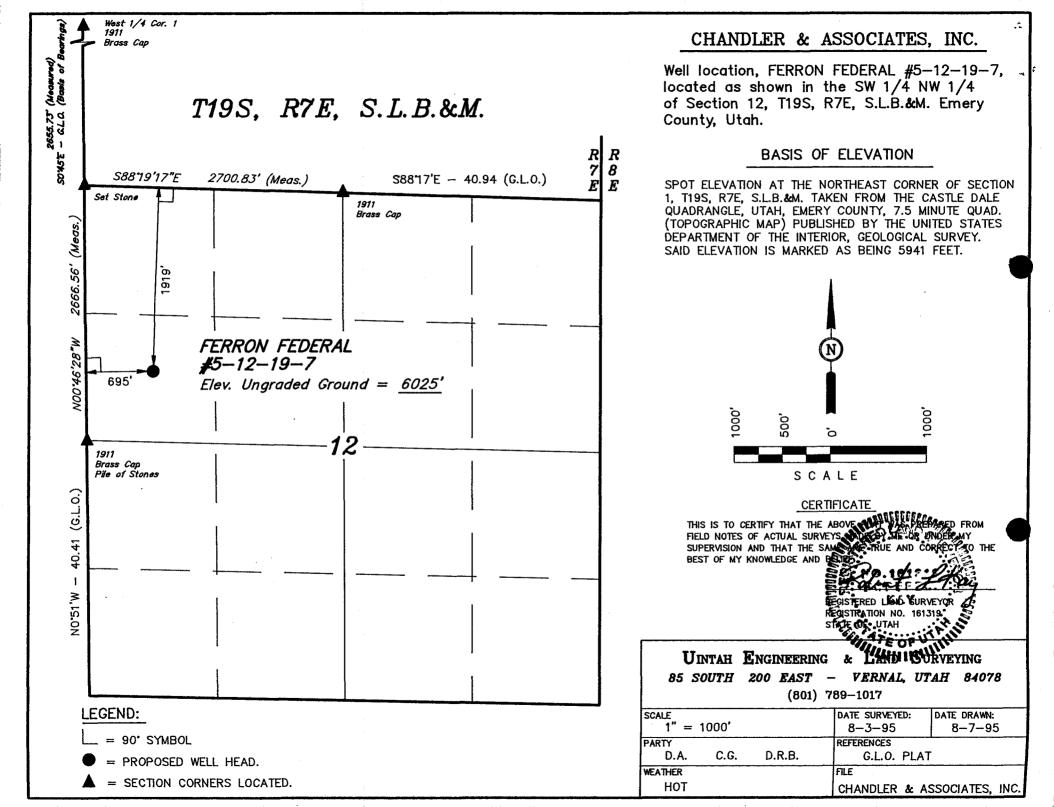
Form approved.
Budget Bureau No. 1004-0136
Expires: December 31, 1991

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

5. LEASE DESIGNATION AND SERIAL NO.

APPLI	CATION FOR P	ERMIT TO I	ORIL	L OR DEEPEN		6. IF INDIAN, ALLOT	TEE OR TRIBE NAME	
1a. TYPE OF WORK	A. TYPE OF WORK DRILL X DEEPEN							
b. TYPE OF WELL	ILL IXI	DEEPEN				7. UNIT AGREEMENT	RAMB	
	AS Y OTHER			NGLE MULTIP	LE	N/A 8. PARM OR LEASE NAME.	WELL NO.	
2. NAME OF OPERATOR	DE CAD VINER			ONE L. ZONE		Ferron Fed	era1	
Chandler &	Associates, Inc					9. API WELL NO.	CIGI	
3. ADDRESS AND TELEPHONE NO.				(303) 295	-0400	#5-12-19-7		
475 Sevente	enth St., Suite	1000 Denv	er, (0 80202		10. FIELD AND POOL	, OR WILDCAT	
4. LOCATION OF WELL (R At surface	eport location clearly and	in accordance wit	th any 8	state requirements.*)		Ferron		
1919'	FNL 1867'FEL	Sec. 12. T	19S.	R7E, S.L.B. &	м.	11. SHC., T., R., M., O AND SURVEY OR	R BLK. AREA	
At proposed prod. zor	ie	,		SNEWNIN	4	Sec.12,T19S,	R7E, S.L.B.&	
14. DISTANCE IN MILES	AND DIRECTION FROM NEAR	REST TOWN OR POS	T OFFIC	*	Υ	12. COUNTY OR PARI	SH 13. STATE	
	p "A" (attached)				Emery	UT	
15. DISTANCE FROM PROPO LOCATION TO NEARES	r		16. N	O. OF ACRES IN LEASE	17. NO. C	OF ACRES ASSIGNED HIS WELL	-	
PROPERTY OR LEASE I		100'	\ 	1480.44	1	160		
18. DISTANCE FROM PROI TO NEAREST WELL, D	OSED LOCATION* ORILLING, COMPLETED, 2	000'	19. PI	ROPOSED DEPTH	20. ROTA	RY OR CABLE TOOLS		
OR APPLIED FOR, ON TH	IS LEASE, FT.		1	2270'	<u> </u>	Rotary		
21. ELEVATIONS (Show wh	ether DF, RT, GR, etc.)	6025' GR				A.S.A.P.	WORK WILL START*	
23.		PROPOSED CAS	NG AN	CEMENTING PROGRA	М			
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER F	00T	SETTING DEPTH		QUANTITY OF CER	MENT	
12 1/4"	8 5/8"	24#		300'	(See A	Attached Dril	ling Plan)	
7 7/8"	5 1/2"	15.5#	:	2270'	(See A	Attached Dril	ling Plan)	
2. D 3. R 4. I 5. W 5	.I.R.U. rill to T.D. 22 un 5 1/2" casin f dry hole, wel ell will be dri 1/2" casing. rtify that I am se operations. Associates, Inc	g if commer l will be p lled with a responsibl Bond cover	olugg ir/m e by	ed and abandone ist to T.D. mud the term and cfor lease activ	d as in will b	nstructed by be in place t ons of the le	o run ase to	
deepen directionally, give per 24. SIGNED ROBERT (This space for Federal	BE PROPOSED PROGRAM: If tinent data on subsurface location with the subsur	ons and measured and	true vertie	eal depths. Give blowout prevengent for Chand 1	erter program	, if any. DATE 8-2		
	3 - 0.9 + 30.2		quitable t	APPROVAL DATEitle to those rights in the subject			o conduct operations there	
CONDITIONS OF APPROVA		· · · · ·	. /) .		. •		

*See Instructions On Reverse Side



CHANDLER & ASSOCIATES, INC. DRILLING PLAN FOR THE FERRON FEDERAL #5-12-19-7

I. <u>DRILLING PLAN:</u>

- 1. <u>Geological Surface Formation:</u> EMERY
- 2. Estimated Tops:

Name	Top	Prod. Phase Anticipated
Bluegate Ferron Ss Tununk Sh TD	520' 1810' 2120' 2270'	Gas

3. <u>CASING PROGRAM:</u>

	Hole Depth Size	<u>Csg.</u> <u>Size</u>	<u>Type</u>	Weight
Surface	300' 12-1/4"	8-5/8"	J-55	24#/ft (new)
Prod.	2270' 7-7/8"	5-1/2"	J-55	15.5#/ft (new)

- 4. Operator's Specification for Pressure Control Equipment:
 - A. 2,000 psi W.P. Double Gate BOP or Single Gate BOP (Schematic attached).
 - B. Functional test daily.
 - C. All casing strings shall be pressure-tested (0.2 psi/foot or 1500 psi, whichever is greater) prior to drilling the plug after cementing; test pressure shall not exceed the internal yield pressure of the casing.
 - D. All ram-type preventers and related control equipment shall be tested at the rated working pressure of the stack assembly or at 70 percent of the minimum internal yield pressure of the casing, whichever is less. Tests shall be done at the time of installation, prior to drilling out, and weekly. All tests shall be for a period of 15 minutes.

5. <u>Auxiliary Equipment:</u>

- A. Kelly Cock yes.
- B. Float at the bit no.
- C. Monitoring equipment on the mud system visually.
- D. Full opening safety valve on rig floor yes.
- E. Rotating head no.
- F. The blooie line shall be a least 6" in diameter and extend at least 100' from the wellbore into the reserve/blooie pit.
- G. Blooie line ignition shall be provided by a continuous pilot (ignited when drilling below 500').
- H. Compressor shall be tied directly to the blooie line through a manifold.
- I. A mistor with a continuous stream of water shall be installed near the end of the blooie lines for dust suppression.

6. <u>Proposed Circulating Medium:</u>

Density

Depth Mud Type (lb./gal) Viscosity Water Loss

0'-2120' Air/Mist

TD KCL Water

7. <u>Testing, Logging, and Coring Program:</u>

- A. Cores None anticipated.
- B. DST none anticipated.
- C. Logging DIL-GR (TD to base of surface casing). FDC-CNL-GR-Cal (TD to base of surface casing).

- D. Formation and Completion Interval: Ferron interval, final determination of completion will be made by analysis of logs.
 Stimulation Stimulation will be designed for the particular area of interest as encountered.
- E. Frac gradient approximately .80 psi/ft.

8. <u>Cementing Program:</u>

Casing	<u>Volume</u>	Type & Additives
Surface	150 sx	Class "G" (based on 100% access)
Production	200*	180 sx 50-50 poz, plus 20 sx class "G".

Cement Characteristics:

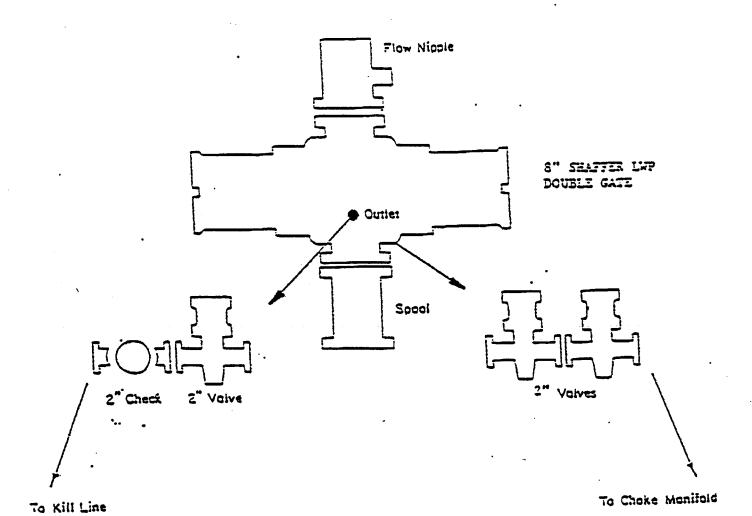
Class "G" - yeild = 1.18 cu.ft. per. sack weight = 15.8 lb./gal strength = 3200 psi in 72 hrs @ 135 degrees

9. Anticipated Abnormal Pressures and Temperatures, Other Potential Hazards:

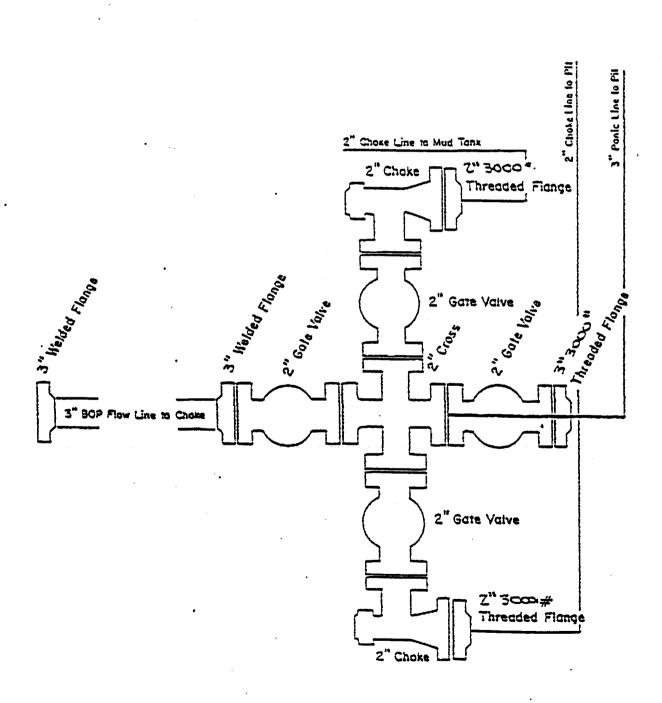
No abnormal temperatures or pressures are anticipated. No $\rm H_2S$ has been encountered in or known to exist from previous wells drilled to similar depths in the general area. Maximum anticipated bottom hole pressure equals approximately 1,500 psi (calculated at 0.661 psi/ft) and maximum anticipated surface pressure equals approximately 1000 psi (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/ft).

^{*} Final cement volumes to be calculated from caliper log with an attempt to be made to circulate cement to the surface. A bond log will be run across the zone of interest and across zones as required by the authorized officer to insure protection of natural resources.

CHANDLER DRILLING RIG NO.7



CHANDLER DRILLING RIG NO.7



II. SURFACE USE PLAN CHANDLER & ASSOCIATES, INC. FERRON FEDERAL #5-12-19-7

1. Existing Road:

- A. Topo Map "A" is the vicinity map, showing the access routes from Castle Dale, Utah.
- B. Topo Map "B" shows the proposed access road to each individual well. It also shows existing roads in the immediate area.
- C. The existing and proposed access road, unless otherwise stated, shall be crowned, ditched, and dipped from the nearest improved road.
- D. Occasional maintenance blading and storm repairs will keep roads in good condition.
- E. There shall be no mud blading on the access road. Vehicles may be towed through the mud provided they stay on the roadway.

2. Planned Access Roads:

The proposed access road, will be crowned, ditched, and dipped.

- A. Maximum grade will be 8% or less, unless otherwise stated.
- B. No turnouts will be required.
- C. Low water crossings to be placed in Proposed Access road during drilling process and culverts may be installed at a later date.
- D. Road surface material will be that native to the area.

- E. No cattleguard will be required.
- F. The proposed access road was flagged at the time the location was staked.
- G. The area authorized officer will be contacted at least 24 hours prior to commencing construction of the access road and well pad.
- H. The backslopes of the proposed access roads will be no steeper than vertical or 1/4:1 in rock; and 2:1, elsewhere.

The operator or his contractor will notify the B.L.M. office at least 48 hours prior to commencement of any work on these locations, roadways, or pipelines.

- I. The proposed access road for this well location is located within the lease boundaries.
- 3. Location of Existing Wells:

See topo map "c"

- 4. <u>Location of Existing and/or Proposed Facilities:</u>
 - A. All Petroleum Production Facilities are to be contained within the proposed location sites.
 - B. In the event that production of these wells is established, the following will be shown:
 - 1. Proposed location and attendant lines, by flagging, if off well pad.
 - 2. Dimensions of facilities.
 - 3. Construction methods and materials.

- C. The area used to contain the proposed production facilities will be built using native materials. If these materials are not acceptable, then other arrangements will be made to acquire them from private sources. These facilities will be constructed using bulldozers, graders, and workman crews to construct and place the proposed facilities.
- D. All permanent facilities placed on the locations shall be painted a non-reflective color which will blend with the natural environment.
- E. A dike shall be constructed around the tank battery, of sufficient capacity to adequately contain at least 110 percent of the storage capacity of the largest tank within the dike.
- F. All buried pipelines shall be covered to a depth of 3 feet except at road crossings where they shall be covered to a depth of 4 feet.
- G. Construction width of the right-of way/pipeline route shall be restricted to 30 feet of disturbance.
- H. Pipeline location warning signs shall be installed within 90 days upon completion of construction.

5. Location and Type of Water Supply:

The water source for this well will be from the Cottonwood Creek Consolidated Irrigation Co. The water user claim number is 93-2185 and the two (2) points of diversion will be from the Clipper Canal or the Western Canal which ever is the most accessible. This water will be hauled by a local trucking company.

No water wells are to be drilled.

6. Source of Construction Materials:

- A. No construction materials are needed for drilling operations. In the event of production, the small amount of gravel needed for facilities will be hauled in by truck from a local gravel pit over existing access roads from the area. No special access other than for drilling operations and pipeline construction is needed.
- B. All access roads crossing B.L.M. Land are described under item #2 and shown on Map #B.

All Construction material for these location sites and access roads shall be borrow material accumulated during the construction of the location sites and access roads. No additional construction material from other sources is anticipated at this time, but if it is required, the appropriate actions will be taken to acquire it from private sources.

C. All well pad surface disturbance area is on B.L.M. lands

7. <u>Methods for Handling Waste Disposal:</u>

- A. Drill cuttings will be buried in the reserve pit when covered.
- B. Drilling fluids will be contained in the reserve pit.
- C. Any hydrocarbon liquids produced while production testing will be contained in a test tank. Any unavoidable spills of oil or other adverse substances or materials will be removed immediately during drilling progress or during completion operations.
- D. Portable chemical toilets will be provided and serviced by a local commercial sanitary service.

E. Garbage and trash will be collected in a trash cage and its contents hauled to a sanitary landfill.

All wastes caused by the construction activities shall be promptly removed and disposed of in a sanitary landfill or as directed by the authorized officer.

F. Prior to commencement of drilling, the reserve pit will be fenced on three sides using 39-inch net wire with at least one (1) strand of barbed wire. All wire is to be stretched before attaching to corner posts. When drilling activities are completed it will be fenced on the fourth side and allowed to dry (if liquids are present). After drying, the fences will be removed and the pit shall be buried. Reclamation will be undertaken no later than the fall of the year after all drilling activity has ceased.

8. Ancillary Facilities:

No air strips, camps, or other living facilities will be built off the location. Housing and office trailers will be on the location as seen on the location layout.

9. Well Site Layout:

- A. See attached cutsheet.
- B. The areas autorized officer will be contacted at least 24 hours prior to commencing construction of the access road and well pad.
- C. The authorized officer will determine after the location is constructed whether the pit is to be lined, and if so, the type of material to be used.
- D. Topsoil shall be stripped to a depth of 4 to 6 inches and stockpiled as shown on the location layout plat.
- E. The backslopes of the locations will be no steeper than vertical or 1/4:1 in rock, and 2:1 elsewhere.

- F. The upper edges of all cut banks on the access roads and well pads will be rounded.
- G. Catchment ponds to be placed as required to intercept drainage re-routes.

10. Plans for Restoration:

- A. Immediately upon completion, the location and surrounding area will be cleared of all debris, materials, trash and junk not required for production.
- B. Before any dirt work to restore the location takes place, the reserve pit must be completely dry. The reserve pit will be reclaimed within 90 days from the date of well completion.
- C. The area officer shall be notified at least 48 hours prior to commencing reclamation work.
- D. All disturbed areas will be seeded with the a mixture which is found suitable by the B.L.M.
- E. The seed bed will be prepared by disking, following the natural contour. Drill seed on contour at a depth no greater than 1/2 inch. In areas that cannot be drilled, the seed will be broadcast at double the seeding rate and harrowed into soil. Certified seed is recommended.
- F. Fall seeding will be completed after September, and prior to prolonged ground frost.

- G. If the well is a producer, access roads will be upgraded and maintained as necessary to prevent soil erosion, and accommodate year round traffic. Areas unnecessary to operations will be reshaped, topsoil distributed, and seed distributed according to the above mixtures. Perennial vegetation must be established. Additional work shall be required in case of seeding failures, etc.
- H. If the well is abandoned or is a dry hole, the access road and location will be restored to approximate the original contours. During reclamation of the site the fill material will be pushed into cuts and up over the backslope. No depressions will be left that would trap water or form ponds. Topsoil will be distributed evenly over the location and seeded according to the above mixture. The access road and the location shall be ripped or disked prior to seeding. Perennial vegetation must be established. Additional work shall be required in case of seeding failures, etc.
- I. Annual or noxious weeds shall be controlled on all disturbed areas. Method of control shall be by an approved mechanical method or an Environmental Protection Agency (EPA) registered herbicide. All herbicide application proposals must be approved. Application of herbicides must be under direct field supervision of an EPA certified pesticide applicator.

11. Other Information:

A. The area is used by man for the primary purpose of grazing domestic livestock.

All activity shall cease when soils or road surfaces become saturated to a depth of three inches, unless otherwise approved by the Authorized Officer.

If any fossils are discovered during construction, the operator shall cease construction immediately and notify the Authorized Officer so as to determine the significance of the discovery.

B. A Class III cultural resource inventory has been completed prior to disturbance by a qualified professional Archaeologist.

- C. The B.L.M. considers the development of groundwater resources to be necessary and frequently indispensable to effective land management. Therefore, any groundwater intercepted by the party conducting mineral exploration shall be reported to the authorized officer immediately including approximate quantities and a sample in a sealed quart container. The B.L.M. shall have the first opportunity to file State water rights for the intercepted groundwater. The undersigned may file for water rights only with a written waiver from the State.
- D. The operator is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials and contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

whether the materials appear eligible for the National Register of Historic Places:

the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, an operator will then be allowed to resume construction.

E. Less than 10,000 pounds of any chemical(s) from EPA's Consolidated list of Chemicals Subject to Reporting Under Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986, and less than threshold planning quantity (TPQ) of any extremely hazardous substances(s), as defined in 40 CFR, would be used, produced, transported, stored, disposed, or associated with the proposed action.

12. Lessee's or Operator's Representative:

Mr. Don Johnson
Manager Operations/Production
Chandler & Associates, Inc.
475 Seventeenth Street
Suite 1000
Denver, Colorado 80202
Telephone #(303) 295-0400

13. Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite(s) and access route(s); that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by **Chandler & Associates**, Inc., and its contractors and subcontractors in conformity with the plan and the terms and conditions under which it is approved.

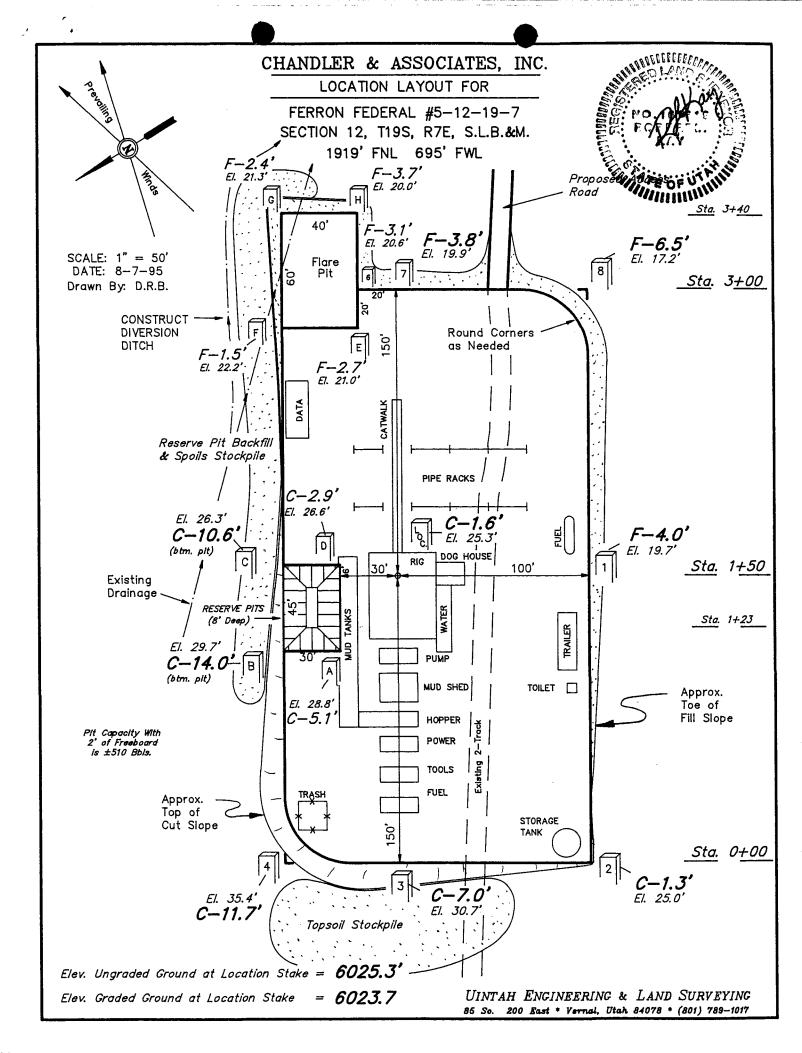
This statement is subject to the provision of 18 U.S.C. 1001 for the filing of a false statement.

8-23-95

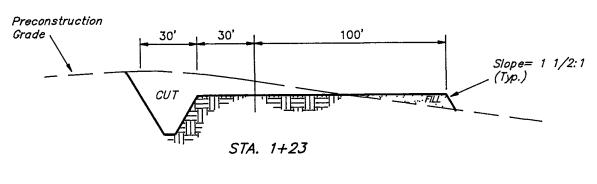
Date

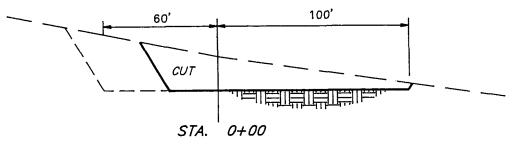
Robert L. Kay

Agent



CHANDLER & ASSOCIATES, INC. TYPICAL CROSS SECTIONS FOR FERRON FEDERAL #5-12-19-7 X-Section SECTION 12, T19S, R7E, S.L.B.&M. 11 Scale 1919' FNL 695' FWL 1" = 50'DATE: 8-7-95 Drawn By: D.R.B. 100' 60' 3+00 STA. 30' 100' 30' LOCATION STAKE FILL Finished Grade 1+50 STA.





APPROXIMATE YARDAGES

(6") Topsoil Stripping = 1,020 Cu. Yds.

Remaining Location = 3,530 Cu. Yds.

TOTAL CUT = 4,550 CU.YDS.

FILL = 3,270 CU.YDS.

EXCESS MATERIAL AFTER

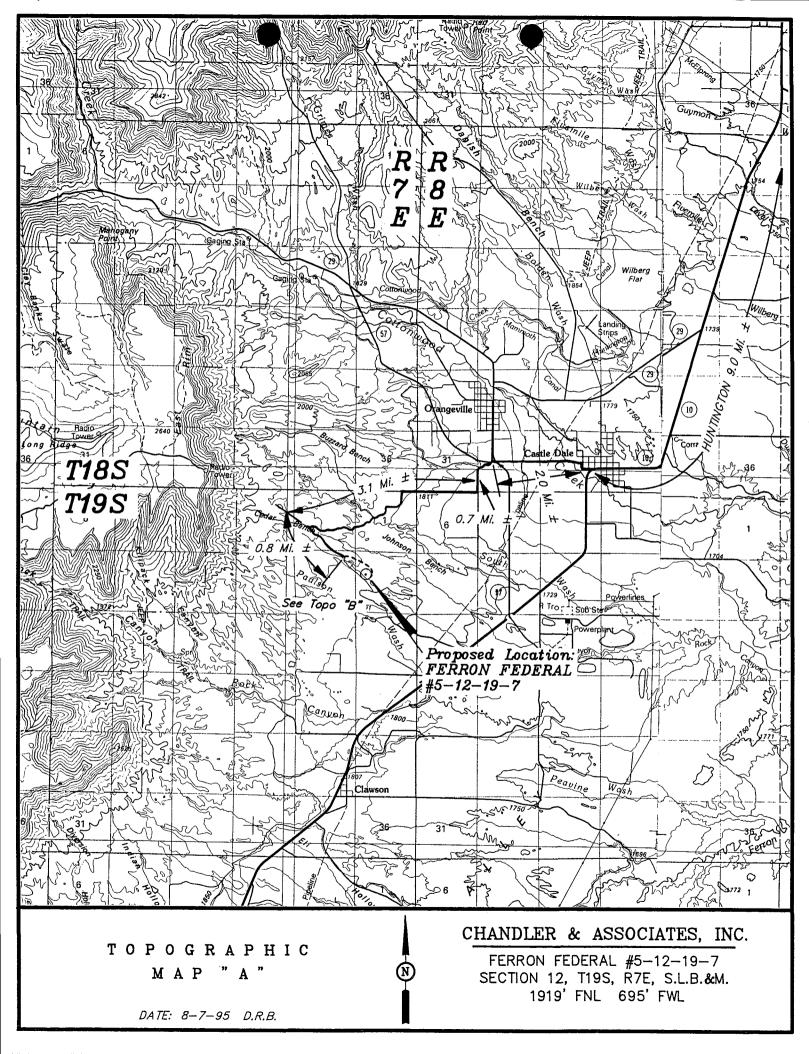
5% COMPACTION = 1,110 Cu. Yds.

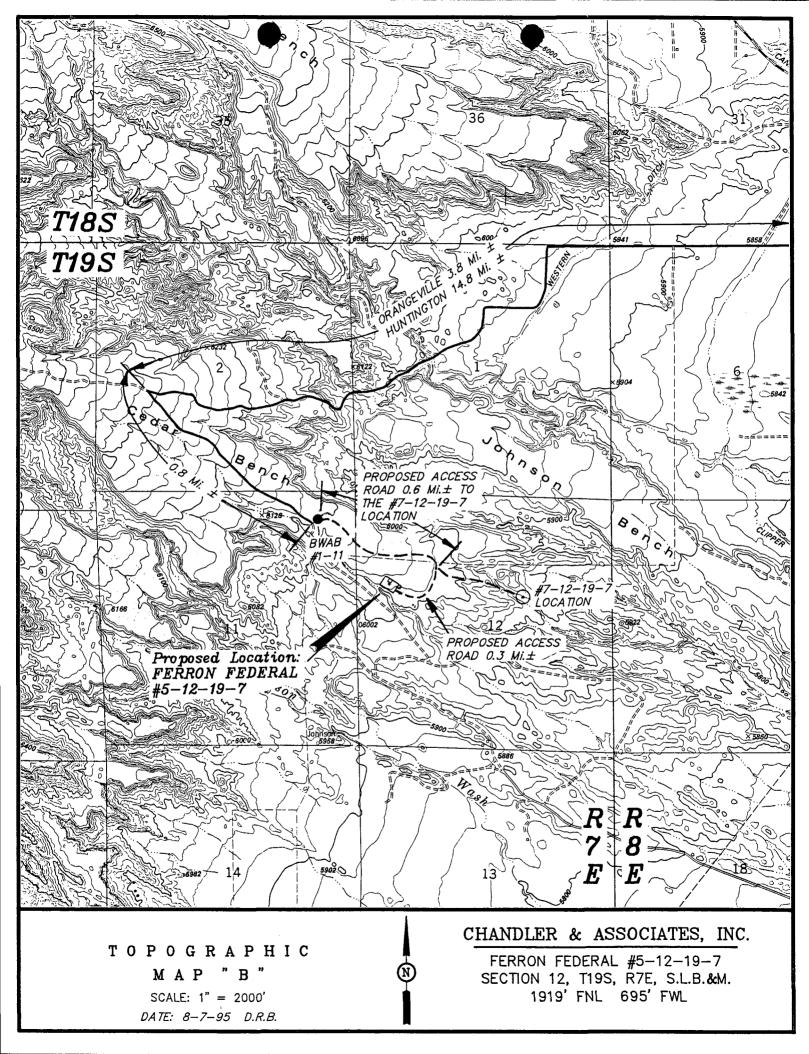
Topsoil & Pit Backfill = 1,110 Cu. Yds.

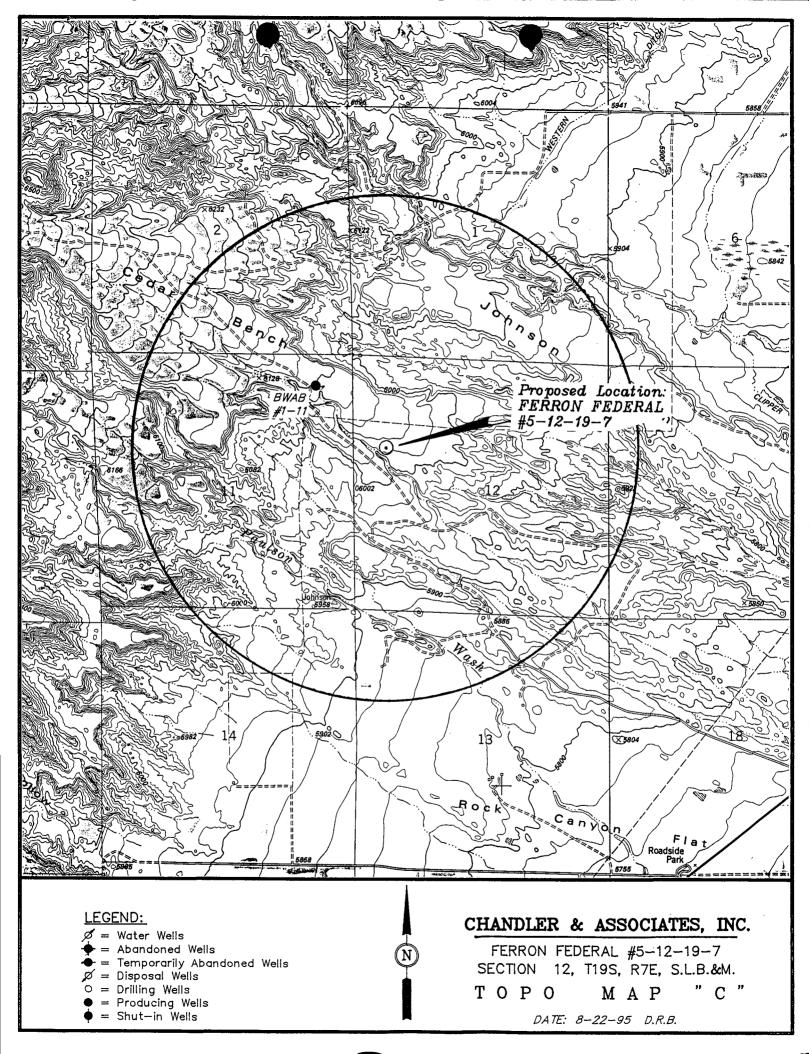
(1/2 Pit Vol.)

EXCESS UNBALANCE = 0 Cu. Yds. (After Rehabilitation)

UINTAH ENGINEERING & LAND SURVEYING 85 So. 200 East * Vernal, Utah 84078 * (801) 789-1017



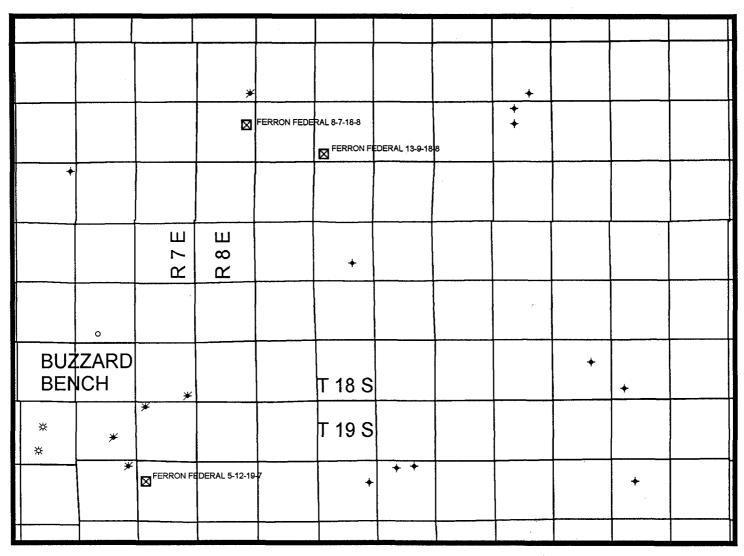


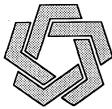


WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 08/25/95	API NO. ASSIGNED: 43-015-30265
WELL NAME: FERRON FEDERAL 5-12-19-7 OPERATOR: CHANDLER & ASSOCIATES	<u>(N3320)</u>
PROPOSED LOCATION: SWN 12 - T19S - R07E SURFACE: 1919-FNL-1867-FEL BOTTOM: 1919-FNL-1867-FEL EMERY COUNTY UNDESIGNATED FIELD (002) LEASE TYPE: FED LEASE NUMBER: U - 18134 PROPOSED PRODUCING FORMATION: FRSD	INSPECT LOCATION BY: / / TECH REVIEW Initials Date Engineering Geology Surface
RECEIVED AND/OR REVIEWED: Plat Bond: Federal[State[] Fee[] (Number 124240364) Potash (Y/N) N Oil shale (Y/N) Water permit (Number 93-2/85) RDCC Review (Y/N) (Date:)	LOCATION AND SITING: R649-2-3. Unit: R649-3-2. General. R649-3-3. Exception. Drilling Unit. Board Cause no: Date:
COMMENTS:	
STIPULATIONS:	

CHANDLER & ASSOCIATES EXPLORATORY DRILLING EMERY COUNTY UTAH STATE SPACING





STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS & MINING

DATE: 8/25/95

STATE OF UTAH, DIV OF OIL, GAS & MINERALS

Operator: CHANDLER & ASSOCIATES | Well Name: FERRON FED 5-12-19-7

Project ID: 43-015-30265 | Location: SEC. 12 - T198 - R07E

Design Parameters:	<u>Design Factors:</u>		
Mud weight (8.33 ppg) : 0.433 psi/ft	Collapse	: 1.125	
Shut in surface pressure : 927 psi	Burst	: 1.00	
<pre>Internal gradient (burst) : 0.024 psi/ft</pre>	8 Round	: 1.80	(J)
Annular gradient (burst) : 0.000 psi/ft	Buttress	: 1.60	(J)
Tensile load is determined using air weight	Other	: 1.50	(1)
Service rating is "Sweet"	Body Yield	: 1.50	(B)

	Length (feet)	Size (in.)	Weight (lb/ft)	Grade	. Join		Depth (feet)	Drift (in.)	Cost
1	2,270	5.500	15.50	J - 55	ST&C	<u>.</u>	2,270	4.825	
	Load (psi)	Collapse Strgth (psi)	S.F.	Burst Load (psi)	Min Int Strgth (psi)	Yield S.F.	Load (kips)	Tension Strgth (kips)	s.F.
1	982	4040	4.114	982	4810	4.90	35.19	202	5.74 J

Prepared by : MATTHEWS, Salt Lake City, Utah

Date : (

: 02-06-1996

Remarks

Minimum segment length for the 2,270 foot well is 1,500 feet.

SICP is based on the ideal gas law, a gas gravity of 0.69, and a mean gas

temperature of 90°F (Surface 74°F , BHT 106°F & temp. gradient 1.400°/100 ft.)

String type: Production

The mud gradient and bottom hole pressures (for burst) are 0.433 psi/ft and

982 psi, respectively.

NOTE:

The design factors used in this casing string design are as shown above. As a general guideline, Lone Star Steel recommends using minimum design factors of 1.125 - collapse (with evacuated casing), 1.0 - (uniaxial) burst, 1.8 - API 8rd tension, 1.6 - buttress tension, 1.5 - body yield tension, and 1.6 - EUE 8rd tension. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and Kemler curve. Engineering responsibility for use of this design will be that of the purchaser.

Costs for this design are based on a 1987 pricing model. (Version 1.07)

Form 9

STANDOF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

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DIVISION OF OIL, GAS AND MINING 6. Lease Designation and Serial Number U-18134 7. Indian Allottee or Tribe Name SUNDRY NOTICES AND REPORTS ON WELLS **N/A** 8. Unit or Communitization Agreement N/A Use APPLICATION FOR PERMIT—for such proposal Type of Well 9. Well Name and Number Oil Ferron Fed. 5-12-19-7 Other (specify) Well Name of Operator 10. API Well Number Chandler & Associates 43-015-30265 Address of Operator 11. Fleid and Pool, or Wildcat 475 17th Street, Suite 1000, Denver, 970-675-8451 Ferron Location of Well : 1919' FNL, 1867' FEL Footage County : Emery QQ, Sec, T., R., M. : SWNE Sec. 12, T19S, R7E : Utah CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA NOTICE OF INTENT SUBSEQUENT REPORT (Submit in Duplicate) (Submit Original Form Only) Abandonment **New Construction** Abandonment * **New Construction** Casing Repair Pull or Alter Casing Casing Repair Pull or After Casing Change of Plans Recompletion Change of Plans Shoot or Acidize Conversion to Injection Shoot or Acidize Conversion to Injection Vent or Flare Fracture Treat Vent or Flare Fracture Treat Water Shut-Off Multiple Completion Water Shut-Off Other other Request APD Extension Date of Work Completion Approximate Date Work Will Start Report results of Multiple Completions and Recompletions to different reservoirs ON WELL COMPLETION OR RECOMPLETION AND LOG FORTIL Must be accompanied by a cement verification report. 13. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) Chandler & Associates requests permission to extend the approved APD dated 2-6-96 for a period of one year. This extension is requested based upon the uncertainty of developing a drilling program due to the ongoing area EIS and the waiting on approval of additional APD's which have been submitted. Recent APD approvals together with an extension of this APD will enable Chandler to develop a drilling program for the calendar year 1997. 14. I hereby certify that the foregoing is true and correct Name & Signature Jim Simonton Title Oper. Supervisor (State Use Only) 1 atthews

(8/90)

See Instructions on Reverse Side

STATE F UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL. GAS AND MINING

4	
	7

DIVISION OF OIL, GAS AND WINNING	6. Lease Designation and Serial Number U-18134						
SUNDRY NOTICES AND REPORTS ON Do not use this form for proposals to drill new wells, deepen existing wells, or to reente	7. Indian Allottee or Tribe Name N/A r plugged and abandoned wells. 8. Unit or Communitization Agreement						
Use APPLICATION FOR PERMIT – for such propos							
1. Type of Well Oil X Gas Other (specify) _ Well	9. Well Name and Number Ferron Fed. 5-12-19-7						
2. Name of Operator Chandler & Associates	10. API Well Number 43-015-30265						
3. Address of Operator	4. Telephone Number 11. Field and Pool, or Wildcat						
475 17th Street, Suite 1000, Denver, CO 80202	970-675-8451 Ferron						
5. Location of Well							
Footage : 1919' FNL, 1867' FEL	county : Emery						
QQ, Sec, T., R., M. : SWNE Sec. 12, T19S, R7E	State : Utah						
	NATURE OF NOTICE, REPORT, OR OTHER DATA						
NOTICE OF INTENT (Submit in Duplicate)	SUBSEQUENT REPORT (Submit Original Form Only)						
Abandonment New Construction Casing Repair Pull or Alter Casing	Abandonment * New Construction Casing Repair Pull or After Casing						
Change of Plans Recompletion	Change of Plans Shoot or Acidize						
Conversion to Injection Shoot or Acidize	Conversion to Injection Vent or Flare						
Fracture Treat Vent or Flare	Fracture Treat Water Shut-Off						
Multiple Completion Water Shut-Off	Other						
other Request APD Extension							
	Date of Work Completion						
Approximate Date Work Will Start	Report results of Multiple Completions and Recompletions to different reservoirs						
	on WELL COMPLETION OR RECOMPLETION AND LOG form. * Must be accompanied by a cement verification report						
13. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinen	Made be decemparated by a centeric remodator report.						
locations and measured and true vertical depths for all markers and zones pertinent	t details, and give pertinent dates. If well is directionally drilled, give subsurface to this work.)						
Chandler & Associates requests permission to extend period of one year. This extension is requested base drilling program due to the ongoing area EIS and the which have been submitted. Recent APD approvals will enable Chandler to develop a drilling program for	ed upon the uncertainty of developing a waiting on approval of additional APD's together with an extension of this APD the calendar year 1997.						
Exter	and to						
2	6 9 d						
CONFIDENTIAL							
14. I hereby certify that the foregoing is true and correct							
Name & Signature Jim Simonton Jim Simonton	Title Oper. Supervisor Date 01/29/97						
(State Use Only)							

FEB 0 3 1997

DIV. OF OIL, GAS & MINING



State of Utah DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt Governor Ted Stewart Executive Director James W. Carter Division Director 355 West North Temple 3 Triad Center, Suite 350 Salt Lake City, Utah 84180-1203 801-538-5340 801-359-3940 (Fax) 801-538-5319 (TDD)

February 6, 1996

Chandler & Associates, Inc. 475 Seventeenth Street, Suite 1000 Denver, Colorado 80202

Re: Ferron Federal 5-12-19-7 Well, 1919' FNL, 1867' FEL, SW NW, Sec. 12, T. 19 S., R. 7 E., Emery County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-015-30265.

Sincerely,

R. J. Firth

Associate Director

lwp

Enclosures

cc: Emery County Assessor

Bureau of Land Management, Moab District Office

WAPD



Chandler & Associates, Inc. Ferron Federal #5-12-19-7						
U-18134						
Sec	12	_ T	19 S.	R	7 E.	
	Ferron 43-015 U-181	Ferron Federal 43-015-30265 U-18134	Ferron Federal #5-12- 43-015-30265 U-18134	Ferron Federal #5-12-19-7 43-015-30265 U-18134	Ferron Federal #5-12-19-7 43-015-30265 U-18134	Ferron Federal #5-12-19-7 43-015-30265 U-18134

Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for Permit to Drill.

2. Notification Requirements

Notify the Division within 24 hours following spudding the well or commencing drilling operations. Contact Jimmie Thompson at (801)538-5340.

Notify the Division prior to commencing operations to plug and abandon the well. Contact Frank Matthews or Mike Hebertson at (801)538-5340.

3. Reporting Requirements

All required reports, forms and submittals shall be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

From: To: Date: Verlene Butts <vbr/>
yes@ut.blm.gov>

NRDOMAIN. NROGM (DS

(8/10/98)2:28pm

Subject:

Rescind well permits?? - Reply

Good Afternoon Don! Well here is the rest of the story, o.k.! The following permits are in the process of being rescinded to the operator, a copy of the letters are forthcoming.

Chandler & Associates, Inc.

3-185-8E 43-015-30260 3-3-18-8

7-185-88 43-015-30263 8-7-18-8

12-195-78 43-015-30265 5-12-19-7

1-195-76 43-015-30261 11-1-19-7

On the following permits I have sent memorandums to the San Juan Resource Area and San Rafael Resource Area to field check the location of rehab and subsequently rescind the permit and release the bond for this location.

Petral Exploration

24-375- Z4E 43-037-31781 1-24X

43-037-31791 Knockdhu Unit #8 33-375-256

Texaco Inc.

43-015-30296 33-22

33-215-6E

Farmington R. A. would handle this permit.

Mobil Oil

43-037-31132 RU 24-41

24-415-23 E

Hope this helps, bye, Verlene

Hi Verlene,

Could you check out the status of the following permits for me. According

records, they are all due to be rescinded.

OPERATOR

WELL

LOCATION

43-015-30260

Chandler

Ferron Fed

3-3-18-8

API

NAME

3-18S-8E

43-015-30261

Chandler

Ferron Fed 11-1-19-7

1-19S-7E

43-015-30263

Chandler

Ferron Fed

8-7-18-8

7-18S-8E

43-015-30265

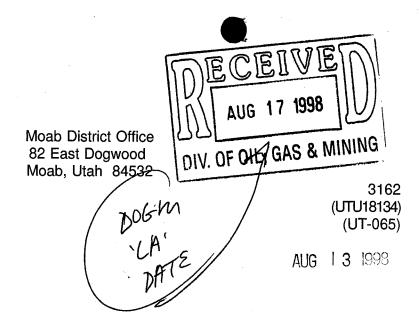
Chandler

Ferron Fed

5-12-19-7 12-19S-7E

CC: WELL FILE

4/2/98



Chandler & Associates, Inc. 475 17th Street, Suite 1000 Denver, Colorado 80202

Re:

Rescinding Application for Permit to Drill

Well No. Ferron Federal 5-12-19-7 SWNW Sec. 12, T. 19 S., R. 7 E.

Emery County, Utah Lease UTU18134 43-015-30265

Gentlemen:

The Application for Permit to Drill the referenced well was approved on January 1, 1996, due to expire January 1, 1997. The approval process has lapsed, and the well has not been drilled, therefore, we are rescinding the APD. Should you intend to drill this location at a future date, a new application for permit to drill must be submitted.

If you have any concerns and/or questions, please contact Verlene Butts, Legal Instruments Examiner at (435) 259-2152.

Sincerely,

/S/ WILLIAM C. STRINGER

Assistant District Manager Resource Management

Enclosure
Application for Permit to Drill (21pp)

cc:

SRRA, UT067 (wo/Enclosure)

State of Utah

Division of Oil, Gas, and Mining

1594 West North Temple, Suite 1210

P. O. Box 145801

Salt Lake City, Utah 84114-5801 (wo/Enclosure)

VButts:vb:8/12/98